Application No.: 10/071,844 Docket No.: 388512010500

CLAIM AMENDMENTS

1. (currently amended): A method to determine whether a first substance interacts with a second substance or to determine the affinity of the first substance for a second substance which method comprises

contacting said first substance coupled to a first demitope with said second substance coupled to a second demitope complementary to the first demitope, wherein said substances are heterologous to the demitopes, in the presence of a reporter,

wherein said first and second demitopes, when assembled, form a paratope which binds said reporter, and wherein said reporter generates an immediate detectable signal when bound to the paratope, and

determining the presence, absence or magnitude of the signal produced;

wherein the presence of the signal indicates said first and second substances interact and the absence of signal indicates the first and second substance do not interact, or

the magnitude of the signal is a measure of the affinity of interaction of said first substance and said second substance,

wherein the binding of the first substance to the second substance or the affinity of any binding is to be tested.

- 2. (original): The method of claim 1, wherein said first and second demitopes are variable regions of the heavy and light chain of an immunoglobulin.
- 3. (original): The method of claim 1, wherein said first and second demitopes are portions of a receptor.
- 4. (original): The method of claim 1, wherein said immediate detectable signal is fluorescence quenching or fluorescence enhancement.
- 5. (currently amended): The method of claim 1, wherein said immediate detectable signal is an alteration of <u>nuclear magnetic resonance</u> (NMR) spectrum of the reporter.

sd-243348 2

Application No.: 10/071,844 Docket No.: 388512010500

6. (original): The method of claim 1, wherein said immediate detectable signal is the effect of a toxin.

- 7. (original): The method of claim 1, which is conducted intracellularly.
- 8. (original): The method of claim 1, wherein the immediate detectable signal is observed by wide-field microscopy.
- 9. (currently amended): The method of claim 1, wherein the first substance is a small molecule non-peptide ligand and the second substance is a protein.
- 10. (original): The method of claim 1, wherein the presence or absence of signal is determined.
- 11. (original): The method of claim 1, wherein the magnitude of the signal is determined.

12-29. (canceled)

sd-243348 3